

CLAIMS

What is claimed is:

1. A system comprising:
 - a first network server to manage and maintain a name-to-address resolution index for a first network; and
 - a second network server to manage and maintain a name-to-address resolution index for a second network, the second server communicatively coupled to the first server and configured to share its name-to-address resolution index with the first server upon request by the first server to discover a peer address without reliance on a common name-to-address resolution server.
2. The system of claim 1 wherein the first and second network servers are at equivalent hierarchical levels.
3. The system of claim 1 wherein the first and second network servers have a common zone relationship .
4. The system of claim 3 wherein access authorization is required before a common zone is established.
5. The system of claim 3 further comprising:
 - a third network server to manage and maintain a name-to-address resolution index for a third network, wherein the second and third network servers have a common zone relationship.
6. The system of claim 5 wherein the second network server is also configured to search the name-to-address resolution index of the third network server upon an address request by the first network server.

7. The system of claim 1 wherein the first network server is also configured to share its name-to-address resolution index with the second network server upon request by the second network server.

8. A device comprising:
 an input interface to receive messages; and
 a processing unit coupled to the input interface, the processing unit to manage communications to at least one peer on a first network and configured to receive and respond to name-to-address resolution requests from the at least one peer on the first network, the processing unit configured to query other devices that manage communications on other networks if the processing unit is unable to resolve the name-to-address resolution request.

9. The device of claim 8 further comprising:
 an output interface to couple the processing unit to the at least one peer on the first network.

10. The device of claim 8 wherein the processing unit responds to a name-to-address resolution request by sending the requested address if it is found, and sending an address not found reply if the address is not found.

11. The device of claim 8 being at an equivalent hierarchical level as the other network management device it queries if it is unable to resolve the requested address.

12. The device of claim 8 wherein the device establishes common zone relationships with the other devices it queries.

13. The device of claim 12 wherein the device provides access authorization before establishing a common zone.

1 14. A method comprising:
2 establishing a common zone relationship for name-to-
3 address resolution sharing between two or more networks;
4 receiving a request from a first peer for the address of
5 a second peer;
6 checking a local name-to-address index for the requested
7 address of the second peer;
8 checking the common zone name-to-address index if the
9 requested address is not found in the local name-to-address
10 index; and
11 returning the requested address to the first peer if the
12 address is found.

13 15. The method of claim 14 further comprising:
14 returning an indication that the requested address was
15 not found to the first peer if the requested address is not
16 found.

17 16. The method of claim 14 wherein establishing a common zone
18 relationship requires authorization.

19 17. The method of claim 14 wherein derivative common zone
20 name-to-address resolution is permitted.

21 18. A machine-readable medium comprising at least one
22 instruction to resolve a peer address, which when executed by
23 a processing unit, causes the processing unit to perform
24 operations comprising:

25 establishing a common zone relationship for name-to-
26 address resolution sharing between two or more networks;
27 receiving a request from a first peer for the address of
28 a second peer;
29 checking a local name-to-address index for the requested
30 address of the second peer;

11 checking the common zone name-to-address index if the
12 requested address is not found in the local name-to-address
13 index; and
14 returning the requested address to the first peer if the
15 address is found.

1 19. The machine-readable medium of claim 18 further
2 comprising:

3 returning an indication that the requested address was
4 not found to the first peer if the requested address is not
5 found.

1 20. The machine-readable medium of claim 18 wherein
2 authorization is required to establish a common zone
3 relationship.

1 21. The machine-readable medium of claim 18 wherein
2 derivative common zone name-to-address resolution is provided.